

wherein the first period is an interval between a timing when the first signal is outputted from said controller and a timing when the electromagnetic wave is outputted from said irradiating unit, and

wherein the second period is an interval between a timing when the second signal is outputted from said controller and a timing when the initialization of said image sensing unit has been completed.

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38. (Amended) An apparatus according to claim 37, wherein said controller controls so that one of the first signal and the second signal starts after the other has started and before it has stopped.

39. (Amended) An apparatus according to claim 37, wherein said image sensing unit has a photo-electric conversion device which outputs a signal in accordance with an electromagnetic wave and the second period is an interval between a timing when the second signal, for initializing said photo-electric conversion device, is outputted from said controller and a timing when the initialization of said photo-electric conversion device has been completed.

40. (Amended) An apparatus according to claim 39, wherein the second period is an interval for a pre-discharge of said photo-electric conversion device.

41. (Amended) An apparatus according to claim 37, wherein said image sensing unit has a grid which absorbs scattered rays from the subject, and said controller generates a third signal for driving said grid so as to overlap the first, the second and a third

period, wherein the third period is an interval between a timing when the third signal is outputted from said controller and a timing when the initialization of said grid has been completed.

42. (Amended) An apparatus according to claim 41, wherein the initialization of said grid is that a position and a moving speed of said grid should reach a target.

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43. (Amended) An apparatus according to claim 37, wherein said image sensing unit has a photo-electric conversion device which outputs a signal in accordance with an electromagnetic wave and a grid which absorbs scattered rays from the subject, and said controller generates a third signal for driving said grid so as to overlap the first, the second and a third period, wherein the third period is an interval between a timing when the third signal is outputted from said controller and a timing when the initialization of said grid has been completed.

44. (Amended) An apparatus according to claim 37, wherein said controller generates the first signal so that an irradiation of the electromagnetic wave starts at a timing when a fourth period is elapsed after said controller has received a fourth signal which instructs a start of imaging, the fourth period being the longer one of the first and second period.

45. (Amended) An apparatus according to claim 41, wherein said controller generates the first signal so that an irradiation of the electromagnetic wave starts at timing when a fourth period is elapsed after said controller has received a fourth signal which instructs a start of imaging, the fourth period being the longest one of the first, second and third period.

46. (Amended) An imaging system comprising:

an irradiating unit adapted for irradiating an electromagnetic wave;

an image sensing unit adapted for sensing an electromagnetic wave image of a subject using the electromagnetic wave; and

a controller adapted for generating a first signal for permitting said irradiating unit to irradiate the electromagnetic wave and a second signal for initializing said image sensing unit, so as to overlap a first period and a second period,

wherein the first period is an interval between a timing when the first signal is outputted from said controller and a timing when the electromagnetic wave is outputted from said irradiating unit, and

wherein the second period is an interval between a timing when the second signal is outputted from said controller and a timing when the initialization of said image sensing unit has been completed.

47. (Amended) A method adapted to an imaging apparatus including an

image sensing unit adapted for sensing an electromagnetic wave image of a subject, comprising a step of:

controlling a controller to generate a first signal for permitting an irradiating unit to irradiate an electromagnetic wave and a second signal for initializing the image sensing unit, so as to overlap a first period and a second period,

wherein the first period is an interval between a timing when the first signal is outputted from the controller and a timing when the electromagnetic wave is outputted from the irradiating unit, and

wherein the second period is an interval between a timing when the second signal is outputted from the controller and a timing when the initialization of the image sensing unit has been completed.

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48. (Amended) A method according to claim 47, wherein in said controlling step, one of the first signal and the second signal is started after the other has started and before it has stopped.

49. (Amended) A method according to claim 47, wherein the image sensing unit has a photo-electric conversion device which outputs a signal in accordance with an electromagnetic wave and the second period is an interval between a timing when the second signal, for initializing the photo-electric conversion device, is outputted from the controller and a timing when the initialization of the photo-electric conversion device has been completed.

50. (Amended) A method according to claim 49, wherein the second period is an interval for a pre-discharge of the photo-electric conversion device.

51. (Amended) A method according to claim 47, wherein the image sensing unit has a grid which absorbs scattered rays from the subject, and said controlling step includes controlling the controller to generate a third signal for driving the grid so as to overlap the first,

the second and a third period, wherein the third period is an interval between a timing when the third signal is outputted from the controller and a timing when an initialization of the grid has been completed.

52. (Amended) A method according to claim 51, wherein the initialization of the grid is that a position and a moving speed of the grid should reach a target.

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53. (Amended) A method according to claim 47, wherein the image sensing unit has a photo-electric conversion device which outputs a signal in accordance with an electromagnetic wave and a grid which absorbs scattered rays from the subject, and said controlling step includes controlling the controller to generate a third signal for driving the grid so as to overlap the first, the second and a third period, wherein the third period is an interval between a timing when the third signal is outputted from the controller and a timing when an initialization of said grid has been completed.

54. (Amended) A method according to claim 47, wherein in said controlling step, the first signal is generated so that an irradiation of the electromagnetic wave starts at a timing when a fourth period is elapsed after the controller has received a fourth signal which instructs a start of imaging, the fourth period being the longer one of the first and second period.

55. (Amended) A method according to claim 51, wherein in said controlling step, the first signal is generated so that an irradiation of the electromagnetic wave starts at a timing when a fourth period is elapsed after the controller has received a fourth signal which

instructs a start of imaging, the fourth period being the longest one of the first, second and third period.

56. (Amended) A computer-readable storage medium which stores a program for executing a method adapted to an imaging apparatus including an image sensing unit adapted for sensing an electromagnetic wave image of a subject, the method comprising a step of:

controlling a controller to generate a first signal for permitting an irradiating unit to irradiate an electromagnetic wave and a second signal for initializing the image sensing unit, so as to overlap a first period and a second period,

wherein the first period is an interval between a timing when the first signal is outputted from the controller and a timing when the electromagnetic wave is outputted from the irradiating unit, and

wherein the second period is an interval between a timing when the second signal is outputted from the controller and a timing when the initialization of the image sensing unit has been completed.

Please add new claims 57-60 as follows.

57. (New) An imaging apparatus comprising:

an image sensing unit adapted for sensing an electromagnetic wave image of a subject; and

a controller adapted for controlling an initialization start timing of said image sensing unit and an irradiation instruction timing for an irradiating unit adapted for irradiating an

electromagnetic wave, based on an initialization period of said image sensing unit and an irradiation delay period of said irradiating unit.

58. (New) An imaging system comprising:

an irradiating unit adapted for irradiating an electromagnetic wave;

B² an image sensing unit adapted for sensing an electromagnetic wave image of a subject using the electromagnetic wave; and

a controller unit adapted for controlling an initialization start timing of said image sensing unit and an irradiation instruction timing for said irradiating unit, based on an initialization period of said image sensing unit and an irradiation delay period of said irradiating unit.

59. (New) A method adapted to an imaging apparatus including an image sensing unit adapted for sensing an electromagnetic wave image of a subject, comprising a step of:

controlling a controller to control an initialization start timing of the image sensing unit and an irradiation instruction timing for an irradiating unit adapted for irradiating an electromagnetic wave, based on an initialization period of the image sensing unit and an irradiation delay period of the irradiating unit.

60. (New) A computer-readable storage medium which stores a program for executing a method adapted to an imaging apparatus including an image sensing unit adapted for sensing an electromagnetic wave image of a subject, the method comprising a step of: